REMARKS

Claims 1, 3-7, 10, 17, 19-21, 23-29, and 33 are amended. Claims 11-16, 18, and 30 are cancelled. Claims 34-46 are new.

Favorable consideration and allowance of claims 1, 3-7, 10, 17, 19-21, 23-29, 33, and 34-46 is requested.

Respectfully submitted,
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Dated: January 5, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A method for [processing] receiving an output signal from one of a first communication system operating in a first frequency range [pursuant to a first protocol] or a second communication system operating in a second frequency range [pursuant to a second protocol, wherein the output signal is comprised of a number of data packets], the method comprising:

receiving the output signal at a [microcontroller unit] processor;

identifying whether the first communication system [operating in the first frequency range] or the second communication system [operating in the second frequency range] sent the output signal based on information included in the [data packets] output signal; and

implementing [the] a protocol that corresponds to the identified communication system, wherein in response to identifying the first communication system, [the] a first protocol is implemented, and in response to identifying the second communication system, [the] a second protocol is implemented.

2. The method of claim 1 wherein the output signal is one of a baseband signal and a broadband signal.

3. (Amended) The method of claim 1 wherein the first [communication system operates in a frequency band ranging] frequency range is from about 100 KHz to about 1 GHz.

4. (Amended) The method of claim 1 wherein the first [communication system operates in a frequency band ranging] frequency range is from about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

5. (Amended) The method of claim 1 wherein the second [communication system operates in a frequency band ranging] frequency range is from about 1 GHz to about 10 GHz.

6. (Amended) The method of claim 1 wherein the second [communication system operates in a frequency band ranging] frequency range is from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.

7. (Amended) The method of claim 1 wherein the [microcontroller unit] processor has a first process for detecting and processing an output signal from the first communication system, and a second process for detecting and processing an output signal from the second communication system.

8. The method of claim 1 further comprising:

decoding a set of MAC information associated with the output signal.

9. The method of claim 1 further comprising:

decoding and formatting data associated with the output signal.

10. (Amended) The method of claim 1 further comprising:

verifying data associated with the output signal is valid; and

responsive to the data being valid, transmitting the data to a data port that is operatively coupled to the [microcontroller unit] processor.

11. Cancel

12. Cancel

13. Cancel

14. Cancel

15. Cancel

16. Cancel

17. (Amended) The method of claim [11] 1 wherein the [first and second processes of the microcontroller unit can be] method is implemented by at least one of software, firmware, or hardware[, or any combination thereof].

18. Cancel

19. (Amended) A system for [processing] receiving an output signal from one of a first communication system operating in a first frequency range [pursuant to a first protocol] or a second communication system operating in a second frequency range [pursuant to a second protocol, wherein the output signal is comprised of a number of data packets], the system comprising:

a [microcontroller unit] processor for receiving the output signal, wherein the [microcontroller unit performs steps comprising] processor is adapted to:

identify[ing] whether the first communication system [operating in the first frequency range] or the second communication system [operating in the second frequency range] sent the output signal based on information included in the [data packets] output signal; and

implement[ing the] a protocol that corresponds to the identified communication system, wherein in response to identifying the first communication system, [the] a first protocol is implemented, and in response to identifying the second communication system, [the] a second protocol is implemented.

20. (Amended) The [method] system of claim 19 wherein the [microcontroller unit] processor has access to a memory that is configured to receive the output signal.

21. (Amended) The [method] system of claim 20 wherein the memory [of the microcontroller unit] has a first section and a second section, wherein the first section has a first process for detecting and processing an output signal from the first communication system, and the second section has a second process for detecting and processing an output signal from the second communication system.

22. The system of claim 19, wherein the output signal is one of a baseband signal and a broadband signal.

23. (Amended) The system of claim 19 wherein the first [communication system operates in a frequency band ranging] frequency range is from about 100 KHz to about 1 GHz.

24. (Amended) The system of claim 19 wherein the first [communication system operates in a frequency band ranging] frequency range is from about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

25. (Amended) The system of claim 19 wherein the second [communication system operates in a frequency band ranging] frequency range is from about 1 GHz to about 10 GHz.

26. (Amended) The system of claim 19 wherein the second [communication system operates in a frequency band ranging] frequency range is from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.

27. (Amended) The system of claim 19 [further comprising] wherein the processor is adapted to:

[decoding] decode a set of MAC information associated with the output signal.

28. (Amended) The system of claim 19 [further comprising] wherein the processor is adapted to:

[decoding and formatting] decode and format data associated with the output signal.

29. (Amended) The system of claim 19 [further comprising] wherein the processor is adapted to:

verify[ing] data associated with the output signal is valid; and

responsive to the data being valid, transmit[ting] the data to a data port that is operatively coupled to the [microcontroller unit] processor.

30. Cancel

31. The system of claim 19 wherein the first and second communication systems are wireless communication systems.

32. (Amended) The system of claim 19 wherein the [microcontroller unit] processor is a component of one of the first communication system [and] or the second communication system.

33. (Amended) A computer readable medium comprising a plurality of instructions, which when executed by a [microcontroller unit] processor, cause the [microcontroller unit] processor to perform the steps of:

identifying whether a first communication system operating in a first frequency range or a second communication system operating in a second frequency range sent an output signal received by the [microcontroller unit] processor, wherein the identifying is based on information included in data packets comprising the output signal; and

implementing a protocol that corresponds to the identified communication system, wherein in response to identifying the first communication system, a first protocol is implemented, and in response to identifying the second communication system, a second protocol is implemented.

34. (New) A receiver apparatus for receiving wireless communications from a number of communication systems, the apparatus comprising:

a first I/O port for receiving communication information from a wireless device of a first communication system operating in a first frequency range;

a second I/O port for receiving communication information from a wireless device of a second communication system operating in a second frequency range; and

a processor for effecting upon received communication information a protocol that corresponds to one of the first or second communication systems in response to determining which communication system sent the communication information.

35. (New) The apparatus of claim 34, further comprising:

a third I/O port for receiving communication information from a second wireless device of the first communication system.

36. (New) The apparatus of claim 35, wherein the first communication system has a first communication channel for a wireless keyboard and a second communication channel for a wireless mouse, and communication information from the wireless keyboard is received by the first I/O port, and communication information from the wireless mouse is received by the third I/O port.

37. (New) The apparatus of claim 34, further comprising:

a data port operatively coupled to the processor for providing an interface between the apparatus and a host system.

38. (New) The apparatus of claim 34, wherein the communication information from the wireless device of the second communication system is provided to the second I/O port by a media access control module associated with the second communication system.

39. (New) The apparatus of claim 34, further including a memory operatively coupled to the processor, the memory storing a set of instructions that, when executed by the processor, cause the processor to determine from which communication system communication information was received, and to effect a protocol corresponding to that communication system.

40. (New) The apparatus of claim 34, wherein the I/O ports and the processor are included in a microcontroller unit.

41. (New) The apparatus of claim 34 wherein the I/O ports and the processor are components of one of the first communication system or the second communication system.

42. (New) The apparatus of claim 34 wherein the output signal is one of a baseband signal and a broadband signal.

43. (New) The apparatus of claim 34 wherein the first frequency range is from about 100 KHz to about 1 GHz.

44. (New) The apparatus of claim 34 wherein the first frequency range is from about 26 MHz to about 28 MHz, or from about 800 MHz to about 1 GHz.

45. (New) The apparatus of claim 34 wherein the second frequency range is from about 1 GHz to about 10 GHz.

46. (New) The apparatus of claim 34 wherein the second frequency range is from about 1.8 GHz to about 2.0 GHz, or from about 2 GHz to about 4 GHz.